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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Martin Pettersson

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EXAMINER

MILLER, BRANDON J

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/518,906	Applicant(s) PETTERSSON, MARTIN	
	Examiner BRANDON J. MILLER	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 and 9-11 is/are allowed.
- 6) ☒ Claim(s) 7-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendments

Allowable Subject Matter

I. The following is a statement of reasons for the indication of allowable subject matter:

Claim 1 recites a method for communicating data in a time division multiple access system where the data is transmitted wirelessly between stations in time slots, the time slots being organized in frames of a repeating frame structure, the stations selecting time slots for transmission of data according to a self-organizing transmission algorithm which allows a first station to reuse a time slot that is allocated to a second station, with steps as defined in the specification (pages 8-23) including transmitting an addressed message from a first base station to a mobile station via a message handling entity, transmitting an acknowledgement message, which has been generated by the mobile station in response to the addressed message and sent to a second base station, and repeating the transmission of the addressed message from the first base station to the mobile station until either a message handling entity being responsible for the transmission of the addressed message has received the acknowledgement message from the second base station or a maximum number of retransmissions has been performed, receiving the acknowledgement message in the second base station, forwarding the acknowledgement message from the second base station to the message handling entity, the message handling entity being connected to a network to which both the first base station and the second base station are connected, either directly or via at least one intermediate node, and receiving the acknowledgement message in the message handling entity via the network.

Applicant's independent claim 1 comprises a particular combination of elements, which is neither taught nor suggested by the prior art.

Claims 2-6 are allowable based on their dependence of independent claim 1.

Claim 9 recites a message handling entity for controlling data communication between at least one base station and at least one mobile station in a time division multiple access system where the data is transmitted wirelessly between the stations in time slots, the time slots are organized in frames of a repeating frame structure, the stations-select time slots for transmission of data according to a self-organizing transmission algorithm which allows a first station to reuse a time slot that is allocated to a second station, with a structure as defined in the specification (pages 8-23) including a memory area adapted to hold status information pertaining to an addressed message sent from a first base station to a particular mobile station, an interface towards a network adapted to send a control message ordering the first base station to transmit an addressed message to the mobile station, receive an acknowledgement message from a second base station, the acknowledgement message having been generated by the mobile station in response to the addressed message and sent to the second base station, and forward the acknowledgement message for processing in the message handling entity, and a central unit adapted to order retransmission of the addressed message from the first base station, if after a pre-determined interval from the transmission of the addressed message, the status information remains intact in the memory area, order repeated retransmission a maximum number of times and receive the acknowledgement message, and in response thereto, clear the status information in the memory area.

Applicant's independent claim 9 comprises a particular combination of elements, which is neither taught nor suggested by the prior art.

Claims 10-11 are allowable based on their dependence of independent claim 9.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

III. Claims 7 and 8 are rejected under 35 U.S.C. 101 because the claimed computer program is directed to non-statutory subject matter.

Regarding claims 7 and 8 there is no clear antecedent basis in the specification to define what is meant by "a tangible computer readable medium" or "a computer readable medium". It is assumed that such "medium" as specified in claims 7 and 8 is the same as "a carrier" as disclosed in page 22 of the original disclosure, which states that "... the carrier may be a transmissible carrier such as an electrical or optical signal ...the program is embodied in a signal which may be conveyed..."

Thus, as defined in the Specification, page 22, "a tangible computer readable medium" and "a computer readable medium" implicate a signal under transmission. Such a claim for computer instructions is not considered by this office to be statutory under 35 U.S.C. 101. See, e.g., *In re Nuijten*, No. 2006-1371, slip op. at 8 (Fed. Cir. Sep. 20, 2007).

Claim Objections

IV. Claim 1 is objected to because of the following informalities:

Claim 1 recites “transmitting, in response to the addressed message, an acknowledgement message, which has been generated by the mobile station in response to the addressed message and sent to a second base station” in lines 8-10. It would be more clarifying if, in the above limitation, the phrase “in response to the addressed message” in line 8 was removed to avoid redundant language.

Appropriate correction is required.

The specification is objected to as failing to provide proper antecedent basis for the claimed “a tangible computer readable medium” found in claim 7. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o).

Conclusion

V. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDON J. MILLER whose telephone number is (571)272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

May 12, 2008

/Brandon J Miller/
Examiner, Art Unit 2617